fifteen to twenty years several methods for producing transgenic plants have been developed, and the present invention, in particular embodiments, also relates to transgenic versions of the claimed hybrid maize line 34M94.

In the Claims

Claims 5-6, 8, 10-12, 14-16, 18, 19, 21, 23-25, 27-29 and 31-32 have been amended as follows:

5. (Amended)

A tissue culture of regenerable cells of a hybrid maize plant 34M94, representative seed of said hybrid maize plant 34M94 having been deposited under ATCC accession number _____.

6. (Amended)

The tissue culture according to claim 5, the cells or protoplasts of said cells having been isolated from a tissue selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.

8. (Amended)

The maize plant of claim 2 wherein said plant further comprises a genetic factor conferring male sterility.

10. (Amended)

The method of claim 9 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

11. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 2, wherein said maize plant has derived at least 50% of its ancestral alleles from 34M94 and is expressing a combination of at least two 34M94 traits selected from the group consisting of: excellent grain yield potential, strong stalks, resistant to Anthracnose stalk rot, resistant to brittle (green) snapping of stalks, resistant to Gray Leaf Spot, resistant to Fusarium ear rot, white cobs, particularly suited to the Central Corn Belt region of the United States and a relative maturity of approximately 109 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.

12. (Amended)

The hybrid maize plant according to claim 2, wherein the genetic material of said plant contains one or more transgenes.

14. (Amended)

The method of claim 13 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

15. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 12, wherein said maize plant has derived at least 50% of its ancestral alleles from 34M94 and is expressing a combination of at least two 34M94 traits selected from the group consisting of: excellent grain yield potential, strong stalks, resistant to Anthracnose stalk rot, resistant to brittle (green) snapping of stalks, resistant to Gray Leaf Spot, resistant to Fusarium ear rot, white cobs, particularly suited to the Central Corn Belt region of the United States and a relative maturity of approximately 109 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.

16. (Amended)

The hybrid maize plant according to claim 2, wherein the genetic material of said plant contains one or more genes transferred by backcrossing.

18. (Amended)

The method of claim 17 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

19. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 16, wherein said maize plant has derived at least 50% of its ancestral alleles from 34M94 and is expressing a combination of at least two 34M94 traits selected from the group consisting of: excellent grain yield potential, strong stalks, resistant to Anthracnose stalk rot, resistant to brittle (green) snapping of stalks, resistant to Gray Leaf Spot, resistant to Fusarium ear rot, white cobs, particularly suited to the Central Corn Belt region of the United States and a relative maturity of approximately 109 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.

21. (Amended)

The maize plant of claim 20 wherein said maize plant further comprises a genetic factor conferring male sterility.

23. (Amended)

The method of claim 22 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

24. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 20, wherein said maize plant has derived at least 50% of its ancestral alleles from 34M94 and is expressing a combination of at least two 34M94 traits selected from the group consisting of: excellent grain yield potential, strong stalks, resistant to Anthracnose stalk rot, resistant to brittle (green) snapping of stalks, resistant to Gray Leaf Spot, resistant to Fusarium ear rot, white cobs, particularly suited to the Central Corn Belt region of the United States and a relative maturity of approximately 109 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.

25. (Amended)

The hybrid maize plant according to claim 20, wherein the genetic material of said plant contains one or more transgenes.

27. (Amended)

The method of claim 26 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

28. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 25, wherein said maize plant has derived at least 50% of its ancestral alleles from 34M94 and is expressing a combination of at least two 34M94 traits selected from the group consisting of: excellent grain yield potential, strong stalks, resistant to Anthracnose stalk rot, resistant to brittle (green) snapping of stalks, resistant to Gray Leaf Spot, resistant to Fusarium ear rot, white cobs, particularly suited to the Central Corn Belt region of the United States and a relative maturity of approximately 109 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.

29. (Amended)

The hybrid maize plant according to claim 20, wherein the genetic material of said plant contains one or more genes transferred by backcrossing.

31. (Amended)

The method of claim 30 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

32 (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 29, wherein said maize plant has derived at least 50% of its ancestral alleles from 34M94 and is expressing a combination of at least two 34M94 traits selected from the group consisting of: excellent grain yield potential, strong stalks, resistant to Anthracnose stalk rot, resistant to brittle (green) snapping of stalks, resistant to Gray Leaf Spot, resistant to Fusarium ear rot, white cobs, particularly suited to the Central Corn Belt region of the United States and a relative maturity of approximately 109 based on the Comparative Relative Maturity Rating System for harvest moisture of grain.

Please add new claims 33-41 as follows:

33. (New)

A method of making a hybrid maize plant designated 34M94 comprising:

crossing an inbred maize plant GE568044, deposited as _____ with a second inbred maize plant GE533486, deposited as _____; and

developing from the cross a hybrid maize plant representative seed of which having been deposited under ATCC Accession Number _____.

34. (New)

A method of making an inbred maize plant comprising:

obtaining the plant of claim 2 and

applying double haploid methods to obtain a plant that is homozygous at essentially every locus, said plant having received all of its alleles from maize hybrid plant 34M94.

35. (New)

A method for producing an 34M94 progeny maize plant comprising:

(a) growing the plant of claim 2, and obtaining self or sib pollinated seed therefrom; and

(b) producing successive filial generations to obtain a 34M94 progeny maize plant.

36. (New)

A maize plant produced by the method of claim 35, said maize plant having received all of its alleles from hybrid maize plant 34M94.

37. (New)

The maize plant of claim 36 wherein said maize plant comprises 2 or more 34M94 characteristics described in Table 1 or 2.

38. (New)

A method for producing a population of 34M94 progeny maize plants comprising:

(a) obtaining a first generation progeny maize seed produced by crossing the maize plant of claim 2 with a second maize plant;

(b) growing said first generation progeny maize seed to produce F_1 generation maize plants and obtaining self-pollinated seed from said F_1 generation maize plants; and

(c) repeating the steps of growing and harvesting successive filial generations to obtain a population of 34M94 progeny maize plants.

39. (New)

The population of 34M94 progeny maize plants produced by the method of claim 38, said population, on average, deriving at least 50% of its ancestral alleles from 34M94.

40. (New)

A 34M94 maize plant selected from the population of 34M94 progeny maize plants produced by the method of claim 38, said maize plant deriving at least 50% of its ancestral alleles from 34M94.

41. (New)

The method of claim 38, further comprising applying double haploid methods to said F_1 generation maize plant or to a successive filial generation thereof.